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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,794	05/04/2001	Susie J. Wee	10014738-1	8836

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
HOFFMAN, BRANDON S	

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/849,794	WEE ET AL.	
	Examiner	Art Unit	
	Brandon S. Hoffman	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-79 are pending in this office action.

2. Applicant's arguments, filed October 6, 2005, have been considered and are persuasive. However, a new ground of rejection has been made.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 103

4. Claims 1-8, 12-28, and 32-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (U.S. Patent No. 6,810,131) in view of Jandel et al. (U.S. Patent No. 6,931,534).

Regarding claims 1, 13, 21, 50, 57, and 64, Nakagawa et al. teaches a secure and scalable encoding method/system/computer readable medium for encoding data, said secure and scalable encoding system comprised of:

- A segmenter, said segmenter adapted to receive data and segment said data into corresponding regions (fig. 15, ref. num 1100 and 1200);

- A scalable encoder coupled to said segmenter, said scalable encoder adapted to encode data for at least one of said regions into scalable data (fig. 19, encoding side, 6000), said blocks comprising a first block of scalably encoded data that when decoded reconstructs a first version of said original data, said blocks also comprising a second block of scalably encoded data that when decoded in combination with data from said first block reconstructs a second version of said original data (fig. 19, encoding side, 6000/6001); and
- A packetizer coupled to said progressive encrypter, said packetizer adapted to packetize said progressively encrypted scalable data (fig. 19, ref. num 1302).

Nakagawa et al. does not teach scalably encoding the data and then progressively encrypting the scalably encoding data.

Jandel et al. teaches a scalable encoder coupled to said segmenter, said scalable encoder adapted to encode data for at least one of said regions into scalable data (fig. 1, ref. num 107), said blocks comprising a first block of scalably encoded data that when decoded reconstructs a first version of said original data, said blocks also comprising a second block of scalably encoded data that when decoded in combination with data from said first block reconstructs a second version of said original data (fig. 1, ref. num 111 and 115), and then progressively encrypting said first block to generate a first progressively encrypted scalably encoded block (fig. 2a, ref. num 205); and progressively encrypting said second block in combination with said first block or in

combination with said first progressively encrypted scalably encoded block to generate a second progressively encrypted scalably encoded block (fig. 2a, ref. num 205 and col. 3, lines 24-42).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine scalably encoding data and then progressively encrypting the scalably encoded data, as taught by Jandel et al., to the method/system/computer readable medium of Nakagawa et al. It would have been obvious for such modifications because the progressively encrypted, scalably encoded data would not need to be decrypted before decompression of images, thus maintaining security (see col. 2, lines 49-51 of Jandel et al.).

Regarding claims 2, 14, and 22, the combination of Nakagawa et al./Jandel et al. teaches wherein said data is comprised of video frame data (see col. 16, lines 28-30 of Nakagawa et al.).

Regarding claims 3, 15, 16, and 23, the combination of Nakagawa et al./Jandel et al. teaches further comprising a video prediction unit coupled to said segmenter, said video prediction unit adapted to generate prediction error video data and provide said prediction error data to said segmenter (see col. 17, lines 61-66 of Nakagawa et al.).

Regarding claims 4, 17, 24, 51, 58, and 65, the combination of Nakagawa et al./Jandel et al. teaches wherein said scalable encoder is further adapted to encode said at least one of said regions into said scalable data and into header data wherein said header data provides information corresponding to said scalable data (see col. 16, lines 17-27 of Nakagawa et al.).

Regarding claims 5, 18, 25, 52, 59, and 66, the combination of Nakagawa et al./Jandel et al. teaches wherein said progressive encrypter is further adapted to encrypt said header data to provide encrypted header data (see col. 16, lines 17-27 of Nakagawa et al.).

Regarding claims 6, 19, 26, 53, 60, and 67, the combination of Nakagawa et al./Jandel et al. teaches wherein said packetizer is further adapted to packetize said progressively encrypted scalable data and said header data (see col. 17, lines 17-22 of Nakagawa et al.).

Regarding claims 7, 20, 27, 54, 61, and 68, the combination of Nakagawa et al./Jandel et al. teaches wherein said packetizer is further adapted to packetize said progressively encrypted scalable data and said encrypted header data (see col. 17, lines 17-22 of Nakagawa et al.).

Regarding claims 8, 28, 55, 62, and 69, the combination of Nakagawa et al./Jandel et al. teaches wherein said data is selected from the group consisting of: video data, audio data, image data, graphic data, and web page data (see col. 2, lines 42-45 of Nakagawa et al.).

Regarding claims 12, 32, 56, 63, and 70, the combination of Nakagawa et al./Jandel et al. teaches steps b) through e) for only a portion of said data received at step a) (see fig. 15, ref. num 6000 of Nakagawa et al., only a base layer has to be processed for non-paying viewers).

Regarding claims 33, 39, 44, and 71-79, Nakagawa et al. teaches a decoding method/system/computer readable medium for decoding data encoded using a secure and scalable encoding system, said decoding system comprised of:

- Receiving progressively encrypted and scalably encoded data comprising first progressively encrypted and scalably encoded data and second progressively encrypted and scalably encoded data (fig. 19, ref. num 8005);
- Decoding said first scalably encoded data and said second scalably encoded data to produce first decoded data and second decoded data (fig. 19, decoding side); and
- An assembler coupled to said decoder, said assembler adapted to assemble said decoded regions to provide data (fig. 17, ref. num 2302).

Nakagawa et al. does not teach decoding scalably encoded data and then progressively decrypting the scalably decoded data.

Jandel et al. teaches receiving progressively encrypted and scalably encoded data comprising first progressively encrypted and scalably encoded data and second progressively encrypted and scalably encoded data (fig. 1, ref. num 107); decoding said first scalably encoded data and said second scalably encoded data to produce first decoded data and second decoded data (fig. 1, ref. num 111 and 115), and then decrypting said first progressively encrypted and scalably encoded data independently of said second progressively encrypted and scalably encoded data to produce first scalably encoded data (fig. 2a, ref. num 205); and decrypting said second progressively encrypted and scalably encoded data using said first progressively encrypted and scalably encoded data or using said first scalably encoded data to produce second scalably encoded data (fig. 2a, ref. num 205 and col. 3, lines 24-42).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine scalably decoding data and then progressively decrypting the scalably decoded data, as taught by Jandel et al., to the method/system/ computer readable medium of Nakagawa et al. It would have been obvious for such modifications because the progressively encrypted, scalably encoded data would not need to be decrypted before decompression of images, thus maintaining security (see col. 2, lines 49-51 of Jandel et al.).

Regarding claims 34, 40, and 45, the combination of Nakagawa et al./Jandel et al. teaches said decrypter is further adapted to receive a packet containing said progressively encrypted and scalably encoded data and also including unencrypted header data wherein said unencrypted header data provides information corresponding to said scalably encoded data (see fig. 5 and col. 5, line 32 through col. 6, line 4 of Jandel et al.).

Regarding claims 35, 36, 41, 46, and 47, the combination of Nakagawa et al./Jandel et al. teaches wherein said decrypter is further adapted to receive a packet containing said progressively encrypted and scalably encoded data and also including encrypted header data wherein said encrypted header data provides information corresponding to said scalably encoded data, said decrypter further adapted to decrypt said encrypted header (see fig. 5 and col. 5, line 32 through col. 6, line 4 of Jandel et al.).

Regarding claims 37, 42, and 48, the combination of Nakagawa et al./Jandel et al. teaches wherein said assembler is further adapted to assemble said decoded regions to provide video frame data (see col. 20, lines 53-59 of Nakagawa et al.).

Regarding claims 38, 43, and 49, the combination of Nakagawa et al./Jandel et al. teaches wherein said assembler is further adapted to assemble said decoded

regions to provide prediction error video data for use by a video prediction unit (see col. 20, lines 14-19 of Nakagawa et al.).

Claims 9-11 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (USPN '883) as modified by Jandel et al. (USPN '534) and further in view of Van der Auwera et al. (U.S. Patent No. 6,532,265).

Regarding claims 9-11 and 29-31, the combination of Nakagawa et al./Jandel et al. teaches all the limitations of claims 1 and 21, respectively, above. However, Nakagawa et al./Jandel et al. does not teach segmenting said data into corresponding rectangular regions, non-rectangular regions, and overlapping regions.

Van der Auwera et al. teaches segmenting said data into corresponding rectangular regions, non-rectangular regions, and overlapping regions (col. 2, lines 20-28).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine segmenting the data into rectangular, non-rectangular, and overlapping regions, as taught by Van der Auwera et al., to the method/system of Nakagawa et al./Jandel et al. It would have been obvious for such modifications because the segments being divided into different regions allows smaller segmenting values for easier encoding and the realization of a real-time system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brandon Hoffman

BH

CLL
Primary Examiner
AU 2131
12/8/05